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SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,
VC, VN, YU, ZA, ZM, ZW.

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- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for all designations
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- as to non-prejudicial disclosures or exceptions to lack of novelty (Rule 4.17(v)) for the following designation CA

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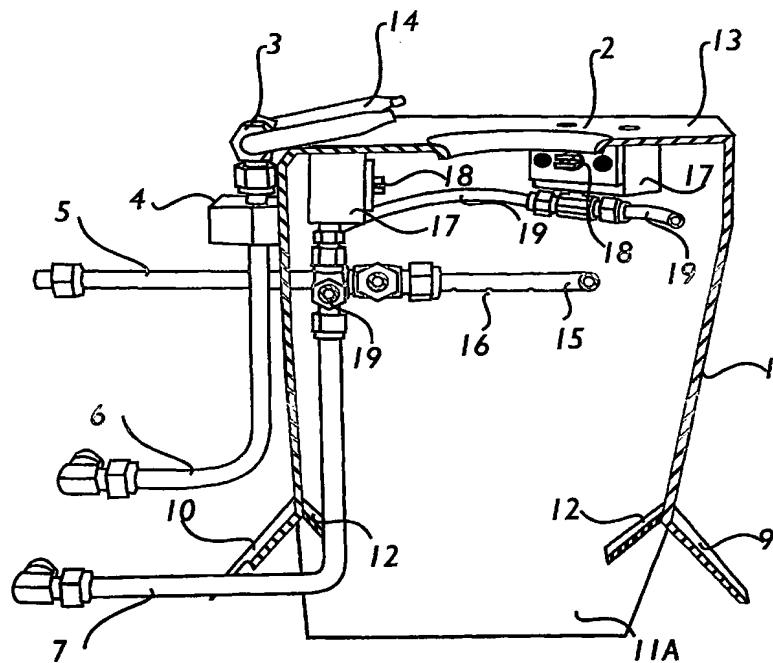
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: NO CONTACT SPRAY APPARATUS CLEANING DEVICE



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(57) Abstract: The invention is an automatic no contact machine for cleaning and drying tips, air caps, retainers and cups on spray apparatus when changing liquid or when the apparatus will be idle, or to remove build up of paint on applicators that cause spits and drips on surfaces and electrostatic arcing to spray apparatus while containing and recovering cleaning effluents to an environmental standard.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/CA 03/00239

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B05B15/02 B08B3/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B05B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

PAJ, WPI Data, EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category ^o	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 0082, no. 46 (C-251), 10 November 1984 (1984-11-10) & JP 59 127671 A (NISSAN JIDOSHA KK), 23 July 1984 (1984-07-23) abstract ----	1-4, 8, 9, 11-13
A	DATABASE WPI Section PQ, Week 199605 Derwent Publications Ltd., London, GB; Class P42, AN 1996-043037 XP002260150 & JP 07 284702 A (TOKICO LTD), 31 October 1995 (1995-10-31) abstract ----	1, 2, 4, 6, 8, 11-13, 15 -/-

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- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

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International Application No

PCT/CA 03/00239

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 101 10 098 A (BARAL KARL-HEINZ) 5 September 2002 (2002-09-05) paragraph '0024! - paragraph '0026! paragraph '0029!; figures -----	1,2,4,6, 8,11-14
A	US 4 827 955 A (STERN LEIF E) 9 May 1989 (1989-05-09) column 3, line 46 - line 56 -----	1-10,15

INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)		Publication date
JP 59127671	A 23-07-1984	NONE		
JP 7284702	A 31-10-1995	NONE		
DE 10110098	A 05-09-2002	DE 10110098 A1		05-09-2002
US 4827955	A 09-05-1989	SE 447799 B AT 65193 T CA 1285195 C DE 3771344 D1 EP 0230245 A2 JP 62183870 A SE 8603759 A		15-12-1986 15-08-1991 25-06-1991 22-08-1991 29-07-1987 12-08-1987 21-07-1987